

## THREE-PHASE ELECTRONIC BALLAST

### Abstract of the Disclosure

5 A ballast (10) for powering at least one gas discharge lamp (52) from a  
three-phase AC voltage source (30) comprises a three-phase rectifier circuit  
(200), a high frequency filter capacitor (300), and a high frequency inverter  
(400). Preferably, three-phase rectifier circuit (200) is implemented by a six-  
diode bridge, and high frequency filter capacitor (300) can be realized by a film  
capacitor or a ceramic capacitor. Ballast (10) provides a high power factor and  
10 low total harmonic distortion without requiring a dedicated power factor  
correction circuit. Other benefits of ballast (10) include enhanced efficiency,  
longer life, and lower inrush current.